

Applicant notes with appreciation the acknowledgment of the claim for foreign priority and the indication that all of the certified copies of the priority documents have been received.

Applicant thanks the Examiner for considering the previously filed Information Disclosure Statement, PTO-1449 paper and cited references.

## **II. Objection to the Drawings**

As regards the indication that "Figure 1 should be designated by a legend such as --Prior Art--," Applicant traverses since the Specification does not characterize Figure 1 as illustrating only that which is old. Withdrawal of this objection is therefore respectfully requested.

## **III. Objection to the Specification**

The Specification was objected to on the basis of certain purported informalities. In this regard, the Examiner will note that the Specification has been amended herein to correct the reference numeral associated with the stereoscopic instrument. No new matter has been added. In view of the foregoing, it is respectfully submitted that the foregoing objection has been obviated, and withdrawal of this objection is therefore respectfully requested.

## **IV. Rejection of Claims 8 to 15 Under 35 U.S.C. § 103(a)**

Claims 8 to 15 were rejected under 35 U.S.C. § 103(a) as unpatentable over German Published Patent Application No. 197 41 393 or U.S. Patent No. 6,116,640 ("Tanaka et al.") in view of German Published Patent Application No. 42 09 536 ("Hofflinger et al."). Applicant respectfully submits that the combination of Tanaka et al. and Hofflinger et al. does not render obvious the present claims as amended herein for the following reasons.

Claim 8 relates to a device for detecting a manner in which a vehicle seat is occupied, that includes a stereoscopic image recording device having at least one optical sensor recording a scene at the vehicle seat and deriving from the scene a three-dimensional map partitioned into a plurality of zones, indicating for each of the zones a distance from a reference point. Claim 8 recites that the at least one optical sensor has a nonlinear transducer characteristic curve over an entire operation range, describing a correlation between an incident light intensity and an

electrical output signal of the at least one optical sensor, and that a steepness of the characteristic curve decreases with increasing light intensity. Claim 8 has been amended herein without prejudice to recite that the device includes a light source arranged to illuminate the scene at the vehicle seat and to shine infrared light synchronously with an activation of the image recording device. Support for the foregoing amendment may be found, for example, in the Specification at least on page 3, lines 31 to 33.

In this regard, for example, the use of an optical sensor having a non-linear transducer characteristic curve over the entire operating range allows the scenes of the vehicle seat to be recorded with high resolution despite high brightness dynamics. Also, the use of infrared light, which is invisible, does not distract the vehicle passengers.

Tanaka et al. purport to relate to “an apparatus for detecting the presence and posture of an occupant, in particular, [an] occupant of an automobile, using linear photosensor arrays” (Col. 1, lines 19 to 20) (emphasis added), and an auxiliary light source 4. See Figure 2 and related text. As admitted by the Office Action on page 3, Tanaka et al. disclose a transducer characteristic curve that is linear in the operating range, and do not disclose a transducer characteristic curve that is non-linear in the entire operating range. It is further respectfully submitted that Tanaka et al. do not disclose, or even suggest, an image recording device that is stereoscopic, or a light source arranged to shine infrared light synchronously with an activation of the stereoscopic image recording device.

In regards to Hofflinger et al., which is a German-language publication, the Office has not provided to Applicant an English-language translation. However, the Office Action makes numerous references to specific page and line numbers of Hofflinger et al., which appears to be nothing more than a mere paraphrase of the statements contained in the International Preliminary Examination Report. Applicant respectfully requests that an English-language translation of Hofflinger et al. be obtained and provided to Applicant. See, M.P.E.P. § 706.02 (if a cited publication is in a language other than English and the Office seeks to rely on that document, a translation ***must*** be obtained so that the record is clear as to the precise facts that the Office is relying upon in support of the rejection). See also, Ex parte Bonfils, 64 U.S.P.Q.2d 1456 (Bd. Pat. App. & Inter. 2002) (unpublished); Ex parte Gavin, 62 U.S.P.Q.2d 1680 (Bd. Pat. App. & Inter. 2001) (unpublished); Ex parte Jones, 62

U.S.P.Q.2d 1206 (Bd. Pat. App. & Inter. 2001). Notwithstanding the foregoing, to facilitate prosecution, Applicant's response refers to U.S. Patent No. 5,608,204 ("Hofflinger et al. '204") which claims priority to German Published Patent Application No. 42 09 536. Applicant's reference herein to Hofflinger et al. '204 does not constitute an admission, concession or assertion that Hofflinger et al. '204 is an English-language translation of Hofflinger et al. or that the disclosure of Hofflinger et al. '204 is the same as the disclosure of Hofflinger et al.

Hofflinger et al. '204 purport to disclose an image cell having a logarithmic transducer characteristic curve. See Hofflinger et al. '204, col. 2, lines 14 to 18. It is respectfully submitted that since a device for detecting the occupancy of vehicle seat is not mentioned, Hofflinger et al. '204 do not disclose a stereoscopic image recording device, or a light source arranged to shine infrared light synchronously with an activation of the stereoscopic image recording device.

In rejecting a claim under 35 U.S.C. § 103(a), the Examiner bears the initial burden of presenting a prima facie case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish prima facie obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim limitations. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

As indicated above, the combination of Tanaka et al. and Hofflinger et al. fails to disclose, or even suggest, all of the limitations of claim 8, in particular, a stereoscopic image recording device or a light source arranged to shine infrared light synchronously with an activation of the stereoscopic image recording device. Accordingly, for this reason alone it is respectfully submitted that the combination of Tanaka et al. and Hofflinger et al. cannot sustain the present rejection.

It also respectfully submitted that the Office Action's asserted suggestion to combine the Tanaka et al. and Hofflinger et al. references plainly based is nothing more than hindsight reasoning. In this regard, in rejecting a claim

under 35 U.S.C. § 103, Applicant's invention "must be viewed not with the blueprint drawn by the inventor, but in the state of the art that existed at the time."

Interconnect Planning Corp v. Feil, 774 F.2d 1132, 1138, 227 U.S.P.Q. 543, 547 (Fed. Cir. 1985) (emphasis added). Indeed, the Office Action does not even assert that it would have been obvious at the time the invention was made to make such a combination. Accordingly, combining these prior art references without evidence of a proper suggestion, teaching, or motivation "simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight." In re Dembiczak, 50 U.S.P.Q.2d 1614, 1617 (CA FC 1999).

It is also plainly evident that the Office Action's assertion that "it would be obvious to use means known from Hofflinger in the case of a device according to Tanaka with corresponding effectiveness, in order to be able to record the scene on the vehicle seat with high resolution and without a costly light source, even in the case of great brightness dynamics" is improperly based on nothing more than the Applicant's own application. See, for example, page 3, lines 16 to 19 of the Specification, which state that Applicant's "nonlinear optical sensor is capable of recording the scene at the vehicle seat with high resolution, even during great brightness dynamics, only a low-cost light source being required for illuminating the scene." It is plainly evident that the alleged motivation stated in the Office Action is nothing more than a mere paraphrase of the features of Applicant's device. In determining whether a person of ordinary skill would have been led to this combination of references, it is improper to simply use that which the inventor taught against its teacher. In re Lee, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir. 2002). Accordingly, for these further reasons, it is respectfully submitted that the rejection should be withdrawn.

Moreover, it is respectfully submitted that the cases of In re Fine, supra, and In re Jones, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992), make plain that the Office Action's generalized assertions that it would have been obvious to modify or combine the references do not properly support a § 103 rejection. It is respectfully submitted that those cases make plain that the Office Action reflects a subjective "obvious to try" standard, and therefore does not reflect the proper evidence to support an obviousness rejection based on the references relied upon. In particular, the Court in the case of In re Fine stated that:

The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. This it has not done. . . .

**Instead, the Examiner relies on hindsight in reaching his obviousness determination. . . . One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.**

In re Fine, 5 U.S.P.Q.2d at 1598 to 1600 (citations omitted; italics in original; emphasis added). Likewise, the Court in the case of In re Jones stated that:

Before the PTO may combine the disclosures of two or more prior art references in order to establish *prima facie* obviousness, there must be some suggestion for doing so, found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. . . .

**Conspicuously missing from this record is any evidence, other than the PTO's speculation (if it be called evidence) that one of ordinary skill . . . would have been motivated to make the modifications . . . necessary to arrive at the claimed [invention].**

In re Jones, 21 U.S.P.Q.2d at 1943, 1944 (citations omitted; italics in original).

That is exactly the case here since it is believed and respectfully submitted that the present Office Action offers no evidence whatsoever, but only conclusory hindsight, reconstruction and speculation, which these cases have indicated does not constitute evidence that will support a proper obviousness finding. Unsupported assertions are not evidence as to why a person having ordinary skill in the art would be motivated to modify or combine references to provide the claimed subject matter of the claims to address the problems met thereby. Accordingly, the Office must provide proper evidence of a motivation for modifying or combining the references to provide the claimed subject matter.

More recently, the Federal Circuit in the case of In re Kotzab has made plain that even if a claim concerns a "technologically simple concept" -- which is not the case here -- there still must be some finding as to the "specific understanding or principle within the knowledge of a skilled artisan" that would motivate a person

having no knowledge of the claimed subject matter to “make the combination in the manner claimed,” stating that:

In this case, the Examiner and the Board fell into the hindsight trap. The idea of a single sensor controlling multiple valves, as opposed to multiple sensors controlling multiple valves, is a technologically simple concept. With this simple concept in mind, the Patent and Trademark Office found prior art statements that in the abstract appeared to suggest the claimed limitation. But, there was no finding as to the specific understanding or principle within the knowledge of a skilled artisan that would have motivated one with no knowledge of Kotzab's invention to make the combination in the manner claimed. In light of our holding of the absence of a motivation to combine the teachings in Evans, we conclude that the Board did not make out a proper prima facie case of obviousness in rejecting [the] claims . . . under 35 U.S.C. Section 103(a) over Evans.

In re Kotzab, 55 U.S.P.Q.2d 1313, 1318 (Fed. Cir. 2000) (emphasis added). Again, it is believed that there have been no such findings.

Accordingly, there is no evidence that the references relied upon, whether taken alone, combined or modified, would provide the features and benefits of claim 8. It is therefore respectfully submitted that claim 8 is allowable for these reasons.

As for claims 9 to 11, 14 and 15, which ultimately depend from claim 8 and therefore include all of its limitations, it is respectfully submitted that these claims are allowable for at least the same reasons that claim 8 is allowable.

## **V. New Claims**

New claims 16 and 17 have been added herein. It is respectfully submitted that the new claims 16 and 17 do not add any new matter and are fully supported by the present application, including the Specification. Claims 16 and 17 depend from claim 8. Therefore, it is respectfully submitted that claims 16 and 17 are allowable for at least the same reasons that claim 8 is allowable.

## **VI. Conclusion**

Attached hereto is a marked-up version of the changes made to the Specification and claims by the current Amendment. The attached pages are captioned “**Version with Markings to Show Changes Made.**”

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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PATENT TRADEMARK OFFICE

**VERSION WITH MARKINGS TO SHOW CHANGES MADE****IN THE SPECIFICATION:**

The paragraph beginning on line 34 of page 5 has been amended as follows:

--As shown in Figure 3, in place of two optical sensors, one single optical sensor 13 can be put in place, on which, via a stereooptical instrument [2] 14, images are imaged which are offset to each other by a defined amount. The stereooptical instrument has two optical ray paths, having rerouting elements 15, 16 and 17 arranged within them, lenses 18 and 19 being arranged at the input to the stereooptical instrument. The rays taken up by the optical paths, offset to each other, of the stereooptical instrument, strike adjoining, separate sensor zones in the optical sensor 13. That means, a sensor here records two images, which are evaluated in the image processor 8 exactly the same as in the exemplary embodiment according to Figure 2.--.

**IN THE CLAIMS:**

Claims 12 and 13 have been canceled without prejudice.

Claims 16 and 17 have been added without prejudice.

Claim 8 has been amended without prejudice as follows:

8. (Amended) A device for detecting a manner in which a vehicle seat is occupied, comprising:

a stereoscopic image recording device including at least one optical sensor recording a scene at the vehicle seat, the image recording device deriving, from the scene, a three-dimensional map partitioned into a plurality of zones, indicating for each of the zones a distance from a reference point, the at least one optical sensor having a nonlinear transducer characteristic curve over an entire operating range, describing a correlation between an incident light intensity and an electrical output signal of the at least one optical sensor, a steepness of the characteristic curve decreasing with increasing light intensity; and



**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

a light source arranged to illuminate the scene at the vehicle seat and to shine infrared light synchronously with an activation of the stereoscopic image recording device.